

Legislative Audit Division

State of Montana



Report to the Legislature

June 2004

Information Systems Audit

Section 8 Housing Information System

Department of Commerce
Housing Assistance Bureau

AUG 09 2004

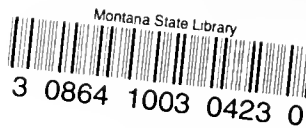
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This report contains two recommendations addressing areas where the Bureau can improve on separating responsibilities for the data input, and evaluating user access privileges.

Direct comments/inquiries to:
Legislative Audit Division
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04DP-05

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INFORMATION SYSTEMS AUDITS

Information Systems (IS) audits conducted by the Legislative Audit Division are designed to assess controls in an IS environment. IS controls provide assurance over the accuracy, reliability, and integrity of the information processed. From the audit work, a determination is made as to whether controls exist and are operating as designed. In performing the audit work, the audit staff uses audit standards set forth by the United States General Accounting Office.

Members of the IS audit staff hold degrees in disciplines appropriate to the audit process. Areas of expertise include business, accounting and computer science.

IS audits are performed as stand-alone audits of IS controls or in conjunction with financial-compliance and/or performance audits conducted by the office. These audits are done under the oversight of the Legislative Audit Committee which is a bicameral and bipartisan standing committee of the Montana Legislature. The committee consists of six members of the Senate and six members of the House of Representatives.

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June 2004

The Legislative Audit Committee
of the Montana State Legislature:

We conducted an Information Systems audit of the Section 8 Housing Information System, Housing Pro, at the Department of Commerce Housing Assistance Bureau. Our audit focused on the Housing Assistance Bureau's administration of the software in accordance with applicable federal guidelines and industry accepted best practices.

We wish to express our appreciation to the department for their cooperation and assistance.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Scott A. Seacat".

Scott A. Seacat
Legislative Auditor

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Legislative Audit Division

Information Systems Audit

Section 8 Housing Information System

**Department of Commerce
Housing Assistance Bureau**

Audit staff involved in this audit was David P. Nowacki.

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Appointed and Administrative Officials

Department of Commerce

Mark Simonich, Director

Housing Assistance Bureau

Bruce Brensdal, Housing Division Administrator

George Warn, Housing Assistance Bureau Chief

Greg LoPiccalo, Section 8 Housing IT Manager

Debbie Morrison, Section 8 Program Specialist Manager

Introduction and Background

Introduction

The Housing Assistance Bureau of the Department of Commerce administers the Section 8 housing program using Housing Pro, a database application purchased from HAPPY Software, Inc., who provides housing-related software solutions to housing agencies in all 50 states. Section 8 housing is a federally funded program providing subsidy payments for rent and utilities to landlords and property owners on behalf of low-income individuals and families.

Background

Housing Pro determines eligibility for the Section 8 program and calculates subsequent payments based on income limits, fair market rent amounts, and utility allowances. The U.S. Department of Housing and Urban Development (HUD) adopts and publishes fair market rent amounts, income limits, and guidelines for determining payment standards. The Housing Assistance Bureau annually develops payment standards and contracts for the development of the utility allowances. Income limits determine eligibility for the Section 8 program based on family size. Fair market rent amounts are used to develop payment standards based on the size of the housing unit. Housing Pro's operation is dependent upon the accuracies of the income limits, payment standards, and utility allowances entered manually into Housing Pro screens.

Objectives

The objectives of this audit were to provide assurance over the accuracy and reliability of the information processed by the Housing Pro application by determining if:

- **Housing Pro accurately determines Section 8 eligibility and subsequent payment amounts based on HUD guidelines and requirements.**
Payment standards, income limits, and utility allowances must be accurately entered into Housing Pro in order to ensure compliance with HUD standards. Refer to Findings and Recommendations section for further discussion.
- **The monthly warrant information interface to the Statewide Accounting, Budgeting and Human Resources System (SABHRS) is complete and accurate.**
To make monthly subsidy payments to landlords and property owners, payment information must be transmitted from

Introduction and Background

Housing Pro to SABHRS, which creates warrants for the State of Montana. During the month-end processes, we found evidence to confirm completeness and accuracy of data transferred, including: a reconciliation process, comparison of totals, file transfer logs, SABHRS upload edit reports.

- **Housing Pro system is protected from common security vulnerabilities.**

Data security depends on the physical and logical security environment of the Housing Pro servers that process the data, and the user privileges for the Housing Pro application. Responsibility for physical and logical security is contracted to the State of Montana's Information Technology Services Division (ITSD). The Housing Pro servers are physically located in the ITSD data center, and ITSD personnel maintain adequate security and ensure timely updates of all patches and updates.

- **User access is appropriate.**

Data integrity and accuracy is dependent upon appropriate Housing Pro user access privileges. Refer to Findings and Recommendations section for further discussion.

Audit Scope and Methodology

The audit was conducted in accordance with government auditing standards published by the United States General Accounting Office (GAO), and accepted industry information systems guidelines.

Fieldwork included a review of general and application control environments. Work in the application controls area concentrated on controls relating to the completeness and accuracy of the Housing Pro to SABHRS interface, and the configuration of the software in accordance with HUD guidelines for income limits, payment standards, and utility allowances. Work in the general controls area concentrated on the physical and logical control environment for the servers housing the software and database, and the appropriateness of user privileges in the database in accordance with accepted industry standards.

To ensure our primary objectives were met, we extracted data from the database and verified the accuracy, observed the month-end interface to SABHRS, reviewed user access privileges for appropriateness, and used reports from industry accepted security

Introduction and Background

scanning software to check for vulnerabilities on the House Pro servers.

Conclusion

With the exception of issues noted in the Findings and Recommendations section of this report, the Housing Assistance Bureau administers Housing Pro in accordance with federal guidelines and industry accepted best practices. Issues found do not present a significant impact on eligibility determination and payment amounts. At the completion of fieldwork, the Section 8 Housing system accurately determined eligibility and payment amounts for the Section 8 Housing program.

Findings and Recommendations

Segregation of Duties

At the most basic level segregation of duties is a key internal control that means no individual should have control over two or more significant phases of an operation. Adequate segregation of duties reduces the likelihood of errors remaining undetected by providing separate processing by different individuals at various phases of an operation and provides independent reviews of work performed.

The Housing Pro software's inability to electronically load data necessitates manual data entry, which is more susceptible to human error. A considerable amount of data must be entered annually into Housing Pro screens including 448 income limits and 448 payment standards spanning 56 counties, and 5,508 utility allowances spanning 18 districts. We reviewed all data entered for accuracy; 8 of the 18 districts had at least one utility allowance error and 1 of the 56 counties had an income limit error. Errors identified did not significantly impact eligibility determination and payment amounts. Payment standards were correct for all 56 counties. Upon notification, Housing Assistance Bureau personnel promptly corrected data entry errors.

The Section 8 IT Manager is responsible for entering all of the data relating to income limits, payment standards, and utility allowances, and reviewing the data entered for accuracy. By separating the data entry function from the review function the Housing Assistance Bureau can better ensure the accuracy of data entered by providing an independent review. This can be done using current Housing Assistance Bureau staff and will not require additional cost.

Recommendation #1

We recommend that the Housing Assistance Bureau separate the data entry function for Section 8 Housing from the data accuracy review function.

User Privileges

Section 8 Housing employees perform functions within Housing Pro based on privileges granted through user privileges screens by the

Findings and Recommendations

Section 8 IT Manager. Privileges can be granted to individual users or groups of users.

Industry standards state that IT management should implement procedures that provide access security control based on the individual's demonstrated need to view, add, change or delete data. Eight users have all privileges for the Housing Pro application, which is beyond what is needed to perform their day-to-day job functions. For instance, the IT Manager is the only user responsible for granting user privileges, yet all eight users have the ability to make changes to privileges. There exists a possibility that data or settings in the application could be changed, whether intentionally or unintentionally, and have an adverse effect on the operation of Housing Pro. Housing Assistance Bureau management confirmed they have not performed a formal assessment of necessary privileges for all users and groups to perform their jobs, consequently no documentation exists supporting user access decisions.

The Housing Assistance Bureau currently has Housing Pro's "audit" feature activated, which logs changes to data and mitigates the risk presented by unnecessary privileges. Logs are backed up nightly and kept for at least 3 months but not reviewed unless a problem is suspected. Unless the audit log is reviewed regularly it is not an effective compensating control.

Recommendation #2

We recommend that the Housing Assistance Bureau:

- A. Conduct a formal assessment of user privileges ensuring privileges are appropriate, and**
- B. Document the assessment.**

Department Response

MONTANA

Department of Commerce

HOUSING DIVISION

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June 8, 2004

Mr. Scott A. Seacat, Legislative Auditor
Legislative Audit Division
Room 160, State Capitol
PO BOX 201705
Helena, MT 59620-1705

Dear Mr. Seacat,

We reviewed recommendations from the Information Systems Audit (04DP-05) of the HUD Section 8 Housing Information System of the Montana Department of Commerce Housing Assistance Bureau. The audit was very important and timely, since the HAPPY Pro system is new to us. We have been given a greater level of confidence in new the system, knowing it has been reviewed by an independent outside source.

Our response to the recommendations is as follows:

Recommendation #1

We recommend that the Housing Assistance Bureau separate the data entry function for Section 8 Housing from the data accuracy review function.

Bureau Response

The Bureau concurs. Entry of baseline income limits, payment standards, and utility allowances which control rental subsidy calculations is very important and interlocks with a new HUD initiative to improve accuracy of participant rent and income calculations. Data entry will be separated from the data review. The Bureau IT Manager will enter new baseline data, and a Program Supervisor will review it prior to releasing it to system users for use in calculating rental amounts.

Recommendation #2

We recommend that the Housing Assistance Bureau:

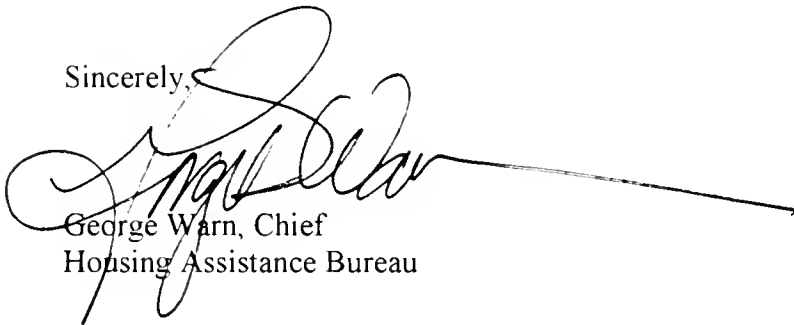
- A. Conduct a formal assessment of user privileges ensuring privileges are appropriate, and**
- B. Document the Assessment.**

Bureau Response

The Bureau Concurs. The Bureau IT Manager conducted and documented the recommended assessment of user privileges. Privileges have been changed to match minimum access requirements for all system users where necessary. The Bureau will maintain written records of privileges granted to all system users, and update on a regular basis.

My staff and I will be available to discuss the audit and recommendations with the Legislative Audit Committee at its convenience.

Sincerely,

A handwritten signature in black ink, appearing to read "George Warn", with a long horizontal line extending to the right.

George Warn, Chief
Housing Assistance Bureau

